

January 18, 2005

Mr. Dale E. Young, Vice President
Crystal River Nuclear Plant (NA1B)
ATTN: Supervisor, Licensing & Regulatory Programs
15760 W. Power Line Street
Crystal River, Florida 34428-6708

SUBJECT: CRYSTAL RIVER NUCLEAR PLANT, UNIT 3 - RESPONSE TO NRC
BULLETIN 2003-02, "LEAKAGE FROM REACTOR PRESSURE VESSEL
LOWER HEAD PENETRATIONS AND REACTOR COOLANT PRESSURE
BOUNDARY INTEGRITY" (TAC NO. MC0532)

Dear Mr. Young:

On August 21, 2003, the U.S. Nuclear Regulatory Commission (NRC) issued NRC Bulletin 2003-02, "Leakage from Reactor Pressure Vessel Lower Head Penetrations and Reactor Coolant Pressure Boundary Integrity," to the industry. This Bulletin informed addressees that current methods of inspecting the reactor pressure vessel (RPV) lower heads may need to be supplemented with bare-metal visual inspections in order to detect reactor coolant pressure boundary leakage and requested these addressees provide the NRC with information related to inspections that have been performed to verify the integrity of the RPV lower head penetrations.

The Bulletin requested that addressees provide a description of the RPV lower head penetration inspection program that would be implemented at their respective plants during the next and subsequent refueling outages. This description was to include the extent of the inspection, the inspection methods to be used, the qualification standards for the inspection methods, the process used to resolve the source of findings of boric acid deposits or corrosion, the inspection documentation to be generated, and the basis for concluding that their plant satisfied applicable regulatory requirements related to the structural and leakage integrity of the RPV lower head penetrations.

By letter dated September 17, 2003, Florida Power Corporation, doing business as Progress Energy Florida, Inc. (PEF) provided its response to this request. PEF indicated it planned to perform a bare-metal visual examination of all 52 RPV lower head penetrations, including 100 percent of the circumference of each penetration as it enters the RPV lower head, during the fall 2003 refueling outage at Crystal River Nuclear Plant, Unit 3. In its same response, PEF committed to scheduling and performing the enhanced visual examinations of each RPV lower head penetration to coincide with the 10-year inservice inspection (ISI) examinations of the RPV. The next 10-year ISI RPV exam is scheduled for 2007. PEF stated that it would monitor industry experience to adjust this schedule appropriately. There are a number of ongoing industry and NRC staff activities related to developing criteria for RPV lower head inspections. The NRC staff expects that the criteria for these inspections will involve periodic bare-metal visual examinations or their equivalent.

D. Young

-2-

The Bulletin also requested that addressees provide a summary of the RPV lower head penetration inspection that was performed at their plants, the extent of the inspection and the methods used, a description of the as-found condition of the lower head, any findings of relevant indications of through-wall leakage, and a summary of the disposition of any findings of boric acid deposits and any corrective actions taken as a result of indications found.

By letter dated December 17, 2003, PEF provided a summary of its inspection results at Crystal River, Unit 3. PEF reported it had performed a 360-degree bare-metal visual examination of the 52 RPV lower head penetrations with no evidence of penetration leakage observed.

Based on its review of PEF's responses to NRC Bulletin 2003-02, the NRC staff finds that PEF has met the reporting requirements of the Bulletin. Accordingly, TAC No. MC0532 is closed for Crystal River, Unit 3.

Sincerely,

/RA/

Brenda Mozafari, Senior Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-302

cc: See next page

D. Young

-2-

The Bulletin also requested that addressees provide a summary of the RPV lower head penetration inspection that was performed at their plants, the extent of the inspection and the methods used, a description of the as-found condition of the lower head, any findings of relevant indications of through-wall leakage, and a summary of the disposition of any findings of boric acid deposits and any corrective actions taken as a result of indications found.

By letter dated December 17, 2003, PEF provided a summary of its inspection results at Crystal River, Unit 3. PEF reported it had performed a 360-degree bare-metal visual examination of the 52 RPV lower head penetrations with no evidence of penetration leakage observed.

Based on its review of PEF's responses to NRC Bulletin 2003-02, the NRC staff finds that PEF has met the reporting requirements of the Bulletin. Accordingly, TAC No. MC0532 is closed for Crystal River, Unit 3.

Sincerely,

/RA/

Brenda Mozafari, Senior Project Manager, Section 2
Project Directorate II
Division of Licensing Project Management
Office of Nuclear Reactor Regulation

Docket No. 50-302

cc: See next page

Distribution:

PUBLIC	ESullivan	JNakoski
PDII-2 R/F	RGramm	
GCheruvenci	RidsNrrPMBMozafari	
RidsNrrDlpm (LMarsh)	RidsNrrPMSMonarque	
RidsNrrDlpmLpdii (EHackett)	RidsNrrLAEDunnington (Hard Copy)	
RidsNrrDlpmLpdii-2 (MMarshall)	ACRS	
RidsOgcRp		

ADAMS ACCESSION NUMBER: ML050100117

NRR-106

OFFICE	PDII-2/PM	PDII-1/PM	PDII-2/LA	EMCB	PDII-2/SC
NAME	BMozafari	SMonarque	EDunnington	ESullivan	MMarshall
DATE	12/8/04	12/9/04	12/03/04	12/13/04	1/18/05

OFFICIAL RECORD COPY

Mr. Dale E. Young
Florida Power Corporation

Crystal River Nuclear Plant, Unit 3

cc:

Mr. R. Alexander Glenn
Associate General Counsel (MAC-BT15A)
Florida Power Corporation
P.O. Box 14042
St. Petersburg, Florida 33733-4042

Chairman
Board of County Commissioners
Citrus County
110 North Apopka Avenue
Inverness, Florida 34450-4245

Mr. Jon A. Franke
Plant General Manager
Crystal River Nuclear Plant (NA2C)
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Mr. Michael J. Annacone
Engineering Manager
Crystal River Nuclear Plant (NA2C)
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Mr. Jim Mallay
Framatome ANP
1911 North Ft. Myer Drive, Suite 705
Rosslyn, Virginia 22209

Mr. Daniel L. Roderick
Director Site Operations
Crystal River Nuclear Plant (NA2C)
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Mr. William A. Passetti, Chief
Department of Health
Bureau of Radiation Control
2020 Capital Circle, SE, Bin #C21
Tallahassee, Florida 32399-1741

Senior Resident Inspector
Crystal River Unit 3
U.S. Nuclear Regulatory Commission
6745 N. Tallahassee Road
Crystal River, Florida 34428

Attorney General
Department of Legal Affairs
The Capitol
Tallahassee, Florida 32304

Mr. Richard L. Warden
Manager Nuclear Assessment
Crystal River Nuclear Plant (NA2C)
15760 W. Power Line Street
Crystal River, Florida 34428-6708

Mr. Craig Fugate, Director
Division of Emergency Preparedness
Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100

David T. Conley
Associate General Counsel II - Legal Dept.
Progress Energy Service Company, LLC
Post Office Box 1551
Raleigh, North Carolina 27602-1551